



GOVERNMENT OF INDIA  
MINISTRY OF COMMERCE

REPORT OF THE  
INDIAN TARIFF BOARD  
ON THE  
STEARIC ACID AND OLEIC ACID INDUSTRIES

1947

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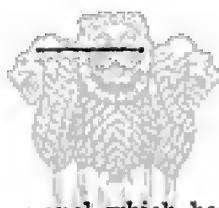
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## REPORT ON THE MOTOR VEHICLE BATTERY INDUSTRY

The Standard Batteries, Ltd., Bombay, in its letter No. 1701<sup>146</sup> (KGP. NAS), dated the 27th April 1946, addressed to the then Department of Commerce, Government of India, asked for Governmental assistance to the motor vehicle battery industry as follows :—

**Application for protection and reference to the Board.**

(i) reduction in the control price of lead and other materials required for battery manufacture ; (ii) remission of duty on raw materials and machinery ; (iii) increase of import duty on batteries and plates to 100 per cent *ad valorem* ; (iv) ban on the import of batteries fitted as original equipment of motor vehicles ; and (v) discouragement of the establishment of battery manufacturing plants in India by foreign companies. The firm also asked that protection should be effective for 10 years, in the first instance. Similar applications for protection were made by the Estrela Batteries, Ltd., Bombay, in its letter dated the 19th May 1946, and the Amco Ltd., Bombay, in its letter dated the 29th May 1946. In a letter dated the 11th November 1946, the Maharatta Chamber of Commerce and Industries, Poona, also supported in general terms the case for protecting the motor vehicle battery industry. The application was at first turned down by Government on the ground that one of the principal component parts required in the building up of storage batteries, *viz.*, the container, was not being manufactured in India. But, on receiving an assurance from the principal applicant, namely, the Standard Batteries, Ltd., Bombay, that the plant and machinery required for the manufacture of containers had already been ordered from abroad and were on their way to India, Government reconsidered the application, and under the then Department of Commerce Resolution No. 218-T(55)<sup>145</sup>, dated the 15th March 1947, read with paragraphs 2 and 7 of its Resolution No. 218-T(55)<sup>145</sup>, dated the 3rd November 1945, and paragraph 4 of the Resolution bearing the same number, dated the 16th February 1946, remitted to the Tariff Board for investigation, the claim of the industry for assistance or protection.

**2. Under the terms of reference contained in the Government of India Resolution dated the 3rd November 1945, the Terms of reference. Board has to satisfy itself—**

- (i) that the industry is established and conducted on sound business lines ;
- (ii) (a) that, having regard to the natural or economic advantages enjoyed by the industry and its actual or probable costs, it is likely within a reasonable time to develop sufficiently to be able to carry on successfully without protection or State assistance ; or
- (b) that it is an industry to which it is desirable in the national interest to grant protection or assistance and that the probable cost of such protection or assistance to the community is not excessive.

- (ii) what additional or alternative measures should be taken to protect or assist the industry ; and
- (iii) for what period, not exceeding three years, the tariff or other measures recommended should remain in force.

In making its recommendations the Board has to give due weight to the interests of the consumer in the light of the prevailing conditions and also consider how the recommendations affect industries using the articles in respect of which protection may be granted.

3. The Board issued a press communiqué on October 18, 1946, inviting all persons associated with this industry, including producers, importers and consumers, who wished their views to be considered, to submit their representations to the Board. Provincial Governments and Administrations were also addressed for their views on the claim for protection. List of persons, associations or firms to whom our detail questionnaires were issued and from whom replies or memoranda were received will be found in Appendix I. Mr. C. C. Desai, a Member of the Board, visited the factory of Navsari Oil Products at Navsari in Baroda State, as also the Mysore Soap Works at Bangalore where they use stearic acid in the manufacture of cosmetics and shaving sticks. The Technical Adviser attached to the Board also visited the factory at Navsari while our Cost Accounts Officer visited the Calcutta and the Navsari factories. Oral evidence of producers, consumers and importers was taken at Bombay on the 25th of June 1947. A list of the witnesses examined is given in Appendix II.

4. Neither stearic acid nor oleic acid was produced on a commercial scale by any firm in India before the last war. The Calcutta Chemical Co., Ltd., had produced a small quantity of oleic acid in 1938, as an experimental measure. In wartime, manufacture of stearic acid came into prominence in view of its use in the production of anti-mosquito cream and in the preparation of aluminium stearate. Imported tallow was procured by Government and supplied to Navsari Oil Products who undertook the manufacture of both stearic acid and oleic acid and who produced about 77 tons of stearic acid and 67 tons of oleic acid between May 1944 and January 1945. Since then, the firm could not carry on the production on a commercial scale because of the shortage of raw materials. It was only recently that production was re-started on the firm getting a small quota of hydrogenated or hardened oil through the good offices of the Food Department of the Government of India. Stearic acid is the main product of the Navsari factory, oleic acid being a by-product. The Calcutta Chemical Co., Ltd., undertook commercial production in March 1944 and its main activity was the manufacture of oleic acid. The factory produced over  $21\frac{1}{2}$  tons of oleic acid and about 3 tons of stearic acid in 1944-45, since when production has been intermittent. The third producer, Messrs. Sanitex Chemical Industries, Ltd., Baroda, also began manufacturing these fatty acids in the beginning of 1945. After producing a small quantity of about  $2\frac{1}{2}$  tons of stearic acid, they stopped further manufacture and are now re-erecting the plant at some new premises in Baroda. There are thus three products of these acids, viz.,

Navsari Oil Products, Calcutta Chemical, and Sanitex Chemical, in Navsari, Calcutta and Baroda, respectively. There were a few other producers of these acids in wartime, such as, Maneklal Auxiliary Products, Bombay, Swastik Oil Mills, Bombay, and Excel Industries, Bombay, but they have ceased production since the termination of war. The industry, as it stands to-day, employs a capital of roughly Rs. 8 $\frac{1}{2}$  lakhs ; the value of the goods produced per year amounts to nearly Rs. 8 lakhs and 73 workers find employment in the industry. For details as to the number of workers employed in the active factories, date of commencement, rated capacity and actual production, Appendix III may be seen.

5. (a) Stearic acid is used, *inter alia*,

- (1) in the preparation of aluminium stearate required for solidifying petrol for firethrowing purposes;
- (2) for the water-proofing and finishing of textiles ;
- (3) in the manufacture of cosmetics ;
- (4) in the production of anti-mosquito cream required by the defence services ;
- (5) in the rubber industry both as a filler and as an ingredient of the rubber compound ;
- (6) for candle making ; and
- (7) to some extent in soap-making.

(b) Oleic acid is used in the manufacture of paints, metal polishes, typewriter ribbons, carbon papers, soaps, woollen textiles, as also in the lubrication of small arms. The defence services were using oleic acid in wartime as a soldering flux.

6. The process followed by Navsari Oil Products consists in splitting tallow or hardened hydrogenated oil into Process fatty acids and separating the stearic acid from

the resultant mixture. This is achieved in an autoclave by super-heated steam in the presence of small quantities of lime and sulphuric acid. The same process will be employed by Modi Vanaspati Manufacturing Company (using their own hydrogenated oils) when they commence production in 1948. Glycerine is recovered as a by-product and the stearic acid is separated from the unsaturated acids. The quality of the stearic acid is refined by final pressing in the hot press. Usually stearic acid is the main product, and oleic acid, a by-product, but the reverse is also possible. Oleic acid is extracted during cold pressing. But, oleic acid is produced in a crude form. Whether it should be distilled will depend upon the use to which it is put and its market value at that time. Calcutta Chemicals, Ltd., and Sanitex Chemical Industries, Ltd., instead of using lime for splitting, employ what is known as Twitchell's process.

7. The main raw materials required in the manufacture of these acids are (1) tallow or hardened oil or both, (2) lime or Raw materials. caustic soda and (3) sulphuric acid. Although

there is no dearth of tallow in India, the indigenous manufacturers have to depend upon imports of this material from Australia. The reason is that there are no organised arrangements in the country for the collection of tallow from slaughter houses and that the price of the indigenous

tallow is rather high. Tallow can, however, be substituted by hydrogenated or hardened vegetable oil which is produced in India in large quantities and which can be made available for this industry in order to foster it. The requirements of hardened oil and ground-nut or cotton seed oil for this industry are not high, being about 1,900 tons (for a production of 1,000 tons of stearic acid and 500 tons of oleic acid) and we hope that the Industries and Supplies Department of the Government of India will, in consultation with the Food Department, be able to secure an adequate allocation of the oils for this industry. Hardened oil has an advantage over tallow, as the recovery of stearic acid from it is larger than from tallow. The Indian producers are paying very high prices for sulphuric acid varying from Rs. 220 to Rs. 260 per ton, although in a number of cases which came before the Tariff Board, our recommendation was that Government should stabilize the price of sulphuric acid at not more than Rs. 160 per ton. Government have accepted the recommendation but apparently the ruling prices are well above the figure intended by Government. For the purpose of costing, we shall take sulphuric acid at Rs. 160 per ton at an Indian port; but at the same time Government must take effective measures to enforce this ceiling price in the country. The lime required by the industry should be of good quality, but there is no difficulty in securing material of the right type. It will thus be seen that the raw materials required for the industry are available in the country and that it should not suffer any handicap in so far as this factory is concerned. If other factors are equally favourable, there is no reason why the industry should not be established on a basis which would enable it to compete with imports from abroad.

8. The following table gives our estimates of pre-war demand, war-time demand and future demand, of both stearic and oleic acids, determined in the light of the advice tendered by the various interests, including producers, consumers, importers and Government departments:—

Name of the Article.	Pre-war demand.	War-time demand.	Future demand
Stearic acid .. .. .. .. ..	Tons. 700	Tons. 1,000	Tons. 1,000
Oleic acid .. .. .. .. ..	400	500	500

The rubber industry is the single largest consumer of stearic acid and is expected to require about 400 tons per year. The textile industry comes next in importance as a consumer of the stearic acid.

9. The statement in Appendix III shows that the present Indian capacity is about 760 tons of stearic acid and 720 tons of oleic acid. The representatives of the Navsari factory stated before the Board that, with the addition of only a small equipment which is already available at the factory, its capacity can be raised from 400 to nearly 600 tons of stearic

acid and from 360 to 540 tons of oleic acid per year. The representative of Sanitex stated that the capacity of his factory is 60 tons of stearic acid and 120 tons of oleic acid, although for the purpose of our statement we have taken the oleic acid capacity at only 60 tons. Moreover, the Modi Vanaspati Manufacturing Company at Modinagar (U.P.) is putting up a plant with an annual capacity of 600 tons each of stearic and oleic acids; this plant is expected to commence production by January 1948 at the latest. Putting all these facts together, it will appear that there will be productive capacity in the country well above 1,000 tons of stearic acid and 500 tons of oleic acid, which is the demand estimated for the next three years. It is also stated that if protection is granted, expansion will follow as a natural corollary, and in less than three years, the total production will considerably exceed the demand so that there will be no need for imports and besides, there would be a certain amount of internal competition, the benefit of which will go to the consumer. Considering the progress made by the industry since 1944 when it came into existence, there is no reason to think that the anticipated production will not be realized if the industry is granted protection.

10. Stearic acid is sold in three qualities, *viz.*, single pressed, double

Quality of the indigenous product. The stearic acid required in the manufacture of cosmetics and pharmaceutical products must conform to certain specifications which restrict the variation of its melting point within very narrow limits. Unless the acid is triple pressed, this melting point is not reached, with the result that the acid produced can hardly be used for pharmaceutical purposes or in the preparation of vanishing creams. The general opinion expressed by importers and consumers was that the quality of the Indian produced article was not up to the standard of the imported product. Martin & Harris of Calcutta have stated that while the Indian article can be used for soap making, its quality is not sufficiently high for superior class toilet creams. Hima Works, Calcutta, producers of face creams, complained that the Indian product does not come up to the standard which requires a melting point of not less than 56°C, crystalline appearance on breaking and absence of any colour and odour. Tata Oil Mills, Bombay, stated that the Indian manufacturers have not been able to supply them with stearic acid of the required specifications. Messrs. F. S. Kerr & Co., Bombay, complained of the quality of the Navsari product before 1945, although they admit that there has been a definite improvement since then. Dunlops, who are one of the biggest consumers of stearic acid for their tyre manufacture, complained of considerable variation in the quality of the locally produced material, and added that the commonest defect of the indigenous material was that it was produced in big slabs requiring shredding for satisfactory incorporation with rubber. Kores, Bombay, producers of carbon paper, state that while the locally made product is good enough for certain purposes, it cannot meet the requirement of high grade quality. The producers present at the public inquiry admitted the existence of some of the defects mentioned by the importers and consumers, but contended that these difficulties could easily be removed if sustained production is achieved as a result of continuous orders and supply of raw materials. Both stearic acid and oleic acid possessing the specifications required by the consuming interests have been

manufactured by some producers and there should be no difficulty in achieving the same results on a commercial scale. We have, therefore, come to the conclusion that while the indigenous products at present fall short of the specifications desired by the consuming interests, the Indian industry, even as it is, is in a position to produce these acids of sufficiently good quality and that it should not be disqualified for protection on this count alone.

11. As agreed at the inquiry, we have taken the cost of production of the triple pressed stearic acid manufactured by Navsari Oil Products for the purpose of comparing it with c.i.f. price of imports. Representatives of the other producers agreed that the Navsari costs should be treated as representing the industry as a whole and that whatever protection is given on the basis of those figures would be acceptable to them. Similarly, it was agreed that we should take, for the present, the cost of production of stearic acid, and not go into the cost of production of oleic acid which is regarded as a by-product in so far as the Indian industry is concerned. The cost of production of stearic acid at Navsari was examined and estimates of future costs were prepared by our Cost Accounts Officer and the results were discussed at the public inquiry, no objection being raised by the producers to their being discussed in public. The cost of production, inclusive of interest and profit, as worked out by us and accepted by the industry comes to Rs. 191 per cwt. for 1947-48 and Rs. 128 per cwt. for 1948-49 and 1949-50. As explained previously, in calculating this cost, we have taken sulphuric acid at Rs. 160 per ton as against a price of Rs. 280 per ton paid by the Navsari factory. Future prices of raw materials have been estimated on the basis of recent prices of the same ; but, should there be any wide fluctuation in these prices, the whole costing will be affected and a revised table of cost would have to be prepared. It will be observed that raw materials cost 87.5 per cent. of the total cost for the year 1947-48, indicating that any substantial variation in the price of raw materials will have a marked effect on the total cost of production of the acid. Credit has been given for the recovery of oleic acid in the total cost of stearic acid. Interest has been calculated at the rate of 4 per cent. per annum on the value of four months' total production and profit has been calculated at 10 per cent. on fixed assets. The profit so worked out comes to a very small figure, as the land and building of the Navsari factory are not owned by the factory but have been taken on rent. It was agreed that the fair selling price of the triple pressed stearic acid should be taken to be Rs. 191 per cwt. for 1947-48 and Rs. 128 per cwt. for 1948-49 and 1949-50. Details of the costs will be found in Appendix IV. The cost of production for 1947-48 is higher than what it was in the year 1944-45 because of the rise in the price of tallow and hardened oil. The cost of production for 1944-45 is shown in a statement in Appendix V. It may be mentioned here that the Navsari factory was maintaining proper cost and financial accounts and that the factory conditions were clean and the plant and machinery appeared to be capable of efficient and economic production.

12. Stearic acid and oleic acid are not specifically mentioned in the Customs duty. Indian Tariff Schedule and are, therefore, deemed to have been included in the general term

"Other acids" in Item 28(8). The relevant extract from Indian Customs Tariff, 27th issue, is given below:—

Item No.	Name of article.	Nature of duty.	Standard rate.	Preferential rate if the article is the produce or manufacture of		
				U. K.	A British colony.	Burma.
28(8)	The following chemicals, drugs and medicines viz. acetic, carbolic, citric, hydrochloric, nitric, oxalic, sulphuric, tartaric and other acids.	Revenue	30% <i>ad valorem</i>	..	..	12% <i>ad valorem</i>
15(3)	Tallow .. ..	..	Free	..	..	..

The above extract also gives information regarding tallow which is a raw material required by the industry. It will be seen that the duty on oleic acid and stearic acid is 30 per cent. *ad valorem*, whereas tallow is admitted free of customs duty, and that the duty is the same whether the imports come from U.K., U.S.A., or other countries, except Burma.

13. Statistics relating to import of stearic acid and oleic acid are not shown separately in the Annual Statement of the Sea-borne Trade. The Industries & Supplies Department have however been able to compile the imports statistics of oleic acid and stearic acid together with tallow and other animal fats. These combined figures are given below:

Year				Tons.
1935-36	..	..	..	7,426
1936-37	..	..	..	10,274
1937-38	..	..	..	2,030
1938-39	..	..	..	1,300

Wartime imports				
1940-41	..	..	..	404
1941-42	..	..	..	340
1942-43	..	..	..	525
1943-44	..	..	..	115
1944-45	..	..	..	147

We could not get any more data even from the importers although some of them have given information as to their own imports. Burmah-Shell, the biggest importers, imported stearic acid to the extent of 181 tons in 1938-39 and 404 tons in 1946. Dunlops' imports of stearic acid for their own use were 75 tons per annum pre-war and 150 tons per annum now. If the industry is protected as a result of our recommendations, statistics of imports of oleic acid and stearic acid should be separately shown in the Annual Statement of the Sea-borne Trade so that full information may be available when an inquiry is next undertaken.

14. It was agreed at the public inquiry that, although stearic acid is produced in three qualities, the one most c.i.f. prices. commonly required is the triple pressed and that, therefore, Indian costs and foreign prices of this quality of stearic acid should be compared with a view to determining the measure of protection necessary, if it should be decided to protect the industry. Secondly, it was agreed that, as stearic acid is the main product and oleic acid a by-product of this industry, it would be sufficient to determine the protection required for the stearic acid and to apply the same to oleic acid, there being thus a common duty for the two acids. We shall, therefore, determine the c.i.f. prices and landed costs of the triple pressed stearic acid. The latest import of this quality of stearic acid is the one received by the Firestone Rubber Co., Bombay, who took delivery of the consignment in June 1947. The import was from U.S.A. The landed cost of this consignment is Rs. 184-2-0 per cwt. made up as follows :—

		Rs. A. P.
C.i.f. price .. .. ..		141 7 0
Duty at 30 per cent .. .. ..		42 7 0
Port Trust, etc., charges .. .. ..		0 4 0
 Total landed cost .. .. ..		<hr/> 184 2 0

This landed cost is higher than that of a consignment received by J. Mayr & Co. of Calentta in 1946, that landed cost being Rs. 149-5-0 per cwt., the c.i.f. price being Rs. 112 per cwt. The only other consignment of triple pressed stearic acid imported into India and of which c.i.f. price and landed cost are available, is the one imported by Sepulchre Brothers (India) Ltd., Bombay, from U.S.A. in the first half of 1947 ; the c.i.f. price of this consignment was Rs. 184 per cwt. and the landed cost came to Rs. 241 per cwt. It was agreed at the inquiry that, for the purpose of this case, the figures supplied by the Firestone Co., should be adopted and that we should take the landed cost of Rs. 184-2-0 per cwt. for the purpose of comparison with the cost of production of triple pressed stearic acid in India. Australia is known to be the cheapest producer of stearic acid, the local price in Australia being £A 36 per ton, which is equal to Rs. 19-4-5 per cwt. The possible export price, however, would be £A 125 per ton c.i.f. Indian port, equal to Rs. 66-14-10 per cwt. The reason for this rather high figure for export price is that there is in Australia a price equalization fund to which exporters of stearic acid have to pay about £A 85 per ton (equal to Rs. 45-8-2 per cwt.) to enable stearic acid to be made available to local industries at a relatively low price. But no imports of stearic acid from Australia have come in the recent past. The above figures show, however, the potentiality of Australia as a competing market ; but until the availability of stearic acid in any quantity from Australia is actually established, we cannot base our calculation of the measure of protection on the Australian possibilities. We have only referred to these figures to show that there is danger of import of stearic acid at very low prices from Australia, thereby justifying the need for protection of the Indian industry. As between possible imports from U.K. and U.S.A., we

could not get any clear information as to which country is likely to offer keener competition. The bulk of the opinion voiced at the inquiry seemed to suggest that in course of time U.K. rather than U.S.A. would be the cheaper source of supply. For the present, however, we have taken the landed cost of stearic acid imported from U.S.A. as the basis for protection since that is the latest import of which up-to-date figures are available. For more information regarding c.i.f. prices and landed costs, both pre-war and since the war, Appendix VI may be seen.

15. Although stearic acid and oleic acid are comparatively small industries, they play a fairly important part in national economy. The largest consumer of stearic acid is the rubber industry, the representatives of which present at the inquiry stated clearly that the importance of stearic acid in rubber manufacture was out of all proportion to the value of the acid as compared with the cost of the other raw materials. Without a regular supply of stearic acid of the proper quality, the rubber industry will come to a standstill ; at any rate, the quality of the tyre produced would be very unsatisfactory. The experience of the war also shows the importance of stearic acid. It was required not only for certain important industries but also by the defence services as stated in paragraph 5. Coming to the cost of production and availability of the material in the world market, we find that, although there is at present a shortage of the acid in the world, still the cost of production in some of the potentially competing countries is so low that it constitutes a threat to our industry where the cost cannot be reduced until it is established on a firm basis with an assured supply of raw materials and continuous offtake. The industry has made good progress during the short period of its existence and can, with the shelter of protection, be consolidated so as to be able to withstand foreign competition within two years. The development of the industry is desirable even from the point of view of the saving of foreign exchange. The total value of 1,000 tons of stearic acid and 500 tons of oleic acid at current landed costs comes to Rs. 36,83,000 and Rs. 8,20,000 respectively ; that is, to a total of about Rs. 45 lakhs per annum. According to our calculations (vide next paragraph), the industry would require protection during 1947-48 and should be self-supporting in 1948-49 and 1949-50 ; but it is possible that expansion of production and curtailment of costs may not adhere to the programme chalked out by the management of the factories, particularly if orders on this case are delayed by Government. We, therefore, think that the industry has made out a case for protection and that protection should be given for the two years, 1947-48 and 1948-49.

16. Having come to the conclusion that the industry should be protected in the initial period of two years by Measure of protection. the end of which it should be in a position to stand on its own legs, we have to determine what the measure of protection should be. This depends upon the difference between the fair selling price of the Indian product and the landed cost of a comparable product. We have taken our cost of production to be Rs. 191 per cwt. in 1947-48 and Rs. 128 per cwt. in 1948-49 and 1949-50. We have

determined the latest landed cost of a comparable product to be Rs. 184-2-0 per cwt. with c.i.f. price of Rs. 141-7-0 per cwt. For the year 1947-48 a duty of 34 per cent. is indicated, whereas the fair selling price estimated by us for the years 1948-49 and 1949-50 would be about 10 per cent. below the latest c.i.f. price and consequently no duty would be ordinarily necessary beyond 1947-48 (vide Table below). But for the reasons given at the end of the previous paragraph, we consider that the industry should be protected for the period ending March 31, 1949.

			1947-48	1948-49 and	1949-50
			Rs. A. P.	Rs. A. P.	
1. Fair selling price ..	..	..	191 0 0	128 0 0	
2. Duty paid landed cost ..	..	..	184 2 0	..	
3. C.i.f. ..	..	..	141 7 0	..	
4. Duty at 30% <i>ad valorem</i> ..	..	..	42 7 0	..	
5. Clearing and other charges ..	..	..	0 4 0	..	
6. Landed cost ex-duty (c.i.f. & clearing charges, i.e. 3+5) ..	..	..	141 11 0	..	
7. Difference between fair selling price and landed cost ex-duty (i.e. 1 & 6) ..	..	..	49 5 0 (-) 13 11 0		
8. Percentage which the above difference bears to the c.i.f. (i.e. 7 ÷ 3) ..	..	..	34.9% (-) 9.7%		

The present duty is 30 per cent. *ad valorem*, revenue. It is undesirable to alter the rate of duty from year to year unless this is absolutely necessary. As we have recommended protection for a period of two years only, it would be desirable to have the same rate of duty for the whole period of protection. We have, therefore, come to the conclusion that the requirements of the industry will be met if the present rate of duty is maintained, provided that the nature of duty is changed from revenue to protective. We, accordingly, recommend that the industry should be protected for a period of two years ending March 1949 by converting the existing 30 per cent. *ad valorem* revenue duty into an equivalent protective duty. At the end of the period of protection, the industry should be declared de-protected unless in the mean time a fresh application for continuance of protection is received and a *prima facie* case is made out for reference of the application to the Tariff Board.

17. Imports of stearic and oleic acids at present are controlled through the issue of import licences, whether the **Import control.** material is received from a dollar area or a sterling area. The industry would like the import control to be continued as an additional measure of protection, but saw the illogicality of it when we explained that with an adequate protective duty and with the ability of the industry to produce an article of suitable quality, there should be no risk of consumers still preferring imported articles to those made locally. The industry agreed with this view and did not press for the continuance of import control as an integral part of the case for protection. With the conversion of the revenue into a protective duty, the import control should be lifted and the two acids should be placed on the list of open general licence unless Government decide to continue the import control for other reasons, such as, conservation of foreign exchange or the balancing of international account.

18. We are satisfied that the industry is run on sound business lines, Eligibility for protection and that, on the whole, it enjoys natural advantages in regard to raw materials, markets, and eventual costs, so as to qualify it for protection. Three of the four

factories likely to be the main producers of stearic acid in the near future will work in close association with producers of hydrogenated oils which will be the chief raw material for the industry so long as tallow is not available in sufficient quantities and at suitable prices. Navsari Oil products are themselves putting up a vegetable ghee plant by the side of their stearic acid factory. Sanitex are allied to Jyoti Products in Baroda who are producers of vegetable ghee, and they will thus be able to get their requirements of oil through their sister concern on the spot. The Modinagar factory will also have the same advantage as the proprietors of the factory also own a vegetable ghee plant in the same premises. Calcutta Chemicals are entering into an agreement with a Calcutta vegetable ghee factory for continuous and assured supply of hardened oil required for their manufacture of oleic and stearic acids. Figures of future costs given earlier in the report show that the industry would need protection only for a short time. Markets are available close to centres of production. We, therefore, come to the conclusion that the industry has established its eligibility for protection.

19. As we have not recommended an increase in the rate of duty,   
 Burden of protection. there will be no increase in the burden of duty merely because of the conversion of the revenue into a protective duty. In any case, the cost of stearic acid is a mere fraction in the cost of rubber manufacture which is the largest consumer of stearic acid, showing that the burden of protection is insignificant and not a factor to be reckoned with.

20. If our recommendation for protection of the stearic acid and Revised customs classification. oleic acid industry is accepted by Government, it will be necessary to amend the existing tariff schedule. This opportunity should be taken to make sure that products containing stearic acid are not imported with a view to evading the protection granted to the industry. We discussed the matter with the interests concerned at the public inquiry, and were advised that the following definition should be adopted for the purpose of the revised classification :

“ Acid oleic and acid stearic, stearine or any product containing 60 per cent. or more of free solid fatty acids.”

The industry would like the definition to say that products containing more than 50 per cent. of the free fatty solid acids should be treated as stearic acid. But we support the figure of 60 per cent. as we are advised that it is not likely that products containing less than 60 per cent. stearic acid would find it worth while to come merely with a view to evasion of

the protective duty. The classification revised in accordance with our recommendation would read as follows :—

Item No.	Name of article.	Nature of duty.	Standard rate.	Preferential rate if the article is the produce or manufacture of		
				U. K.	A British Colony.	Burma.
28(8)	Acid oleic and acid stearic, stearine or any product containing 10 per cent. or more of free solid fatty acids.	Protective	30 percent <i>ad valorem</i>	..	..	12 percent <i>ad valorem</i>
28(8)	A. The following chemicals, drugs and medicines, viz. acetic, carbolic, citric, hydrochloric, nitric, oxalic, sulphuric, tartaric and other acids not otherwise specified.	Revenue	30 percent <i>ad valorem</i>	..	..	12 percent <i>ad valorem</i> .

21. Our conclusions and recommendations are summarised as under :—

**Summary of conclusions and recommendations.**

- (i) The industry is a wartime creation, being started during the Second World War. (Paragraph 4).
- (ii) The main uses of stearic acid and oleic acid are indicated in paragraph 5.
- (iii) According to the process employed in India, stearic acid is the main product and oleic acid a by-product. (Paragraph 6).
- (iv) The main raw materials required in the manufacture of these acids are (1) tallow or hardened oil or both, (2) lime or caustic soda and (3) sulphuric acid. The raw materials are available in the country, and the industry should not suffer any handicap in so far as this factor is concerned. It is hoped that the Industries and Supplies Department of the Government of India, will, in consultation with the Food Department, arrange for an adequate allocation of hardened oil to this industry. (Paragraph 7).
- (v) Our estimate of the future demand of stearic acid and oleic acid for the next three years is 1,000 tons and 500 tons per annum respectively. (Paragraph 8).
- (vi) The country will have a productive capacity of well over 1,000 tons of stearic acid and 500 tons of oleic acid, which are the demands estimated for the next three years. (Paragraph 9).

(vii) While the indigenous products at present fall short of the specifications desired by the consuming interests, the Indian industry, even as it is, is in a position to produce these acids of sufficiently good quality.

(Paragraph 10).

(viii) The prevailing customs duty on imports of stearic acid and oleic acid is 30 per cent. *ad valorem* revenue. [Vide item 28(8) of the Indian Tariff Schedule.]

(Paragraph 12).

(ix) If the industry is protected, statistics of imports of oleic acid and stearic acid should be shown separately in the annual statement of the Sea-Borne Trade so that full information is available for reference in future.

(Paragraph 13).

(x) The c.i.f. price of the imported triple pressed stearic acid in June, 1947, was Rs. 141.7-0, which was accepted by the producers.

(Paragraph 14).

(xi) The industry has made good progress during the short period of its existence and can, with the shelter of protection, be consolidated so as to be able to withstand competition within two years.

(Paragraph 15).

(xii) The industry should be protected for a period of two years ending March, 1949, by converting the existing 30 per cent. *ad valorem* revenue duty into an equivalent protective duty.

(Paragraph 16).

(xiii) With the conversion of the revenue into a protective duty, the import control should be lifted and the two acids should be placed on the list of open general licence, unless the continuance of import control is necessitated for other reasons such as conservation of foreign exchange.

(Paragraph 17).

(xiv) We are satisfied that the industry is run on sound business lines and that, on the whole, it enjoys natural advantages in regard to raw materials, markets and eventual cost, so as to qualify it for protection.

(Paragraph 18).

(xv) As we have not recommended an increase in the rate of duty, there will be no increase in the burden of duty merely because of the conversion of the revenue into a protective duty.

(Paragraph 19).

(xvi) If our recommendation is accepted, the tariff schedule should be revised as suggested in paragraph 20.

22. The Board wishes to express its thanks to Mr. M. Ahmadullah, Secretary, Dr. Rama Varma, Assistant Secretary, Mr. V. H. Mumford, Cost Accounts Officer, and Mr. S. D. Sunawala, Technical Adviser—all officers of the Board, and to Dr. Ali Ahmed, Development Officer of the Department of Industries and Supplies, for help and co-operation in connection with this inquiry.

(Sd.) C. C. DESAI,  
*President.*

(Sd.) H. L. DEY,  
*Member.*

(Sd.) K. UBAIDULLAH,  
*Member.*

(Sd.) M. AHMADULLAH,  
*Secretary.*

BOMBAY,  
15th July 1947.



## APPENDIX L

*List of persons, associations or firms to whom our detailed questionnaires were issued and from whom replies of memoranda were received. (Vide Para. 3).*

(Those who did *NOT* answer the questionnaire are marked with an asterisk).

## I. PRODUCERS:

1. The Calcutta Chemical Co., Ltd., Calcutta.
2. Modi Vanaspati Mfg. Co., P.O. Modinagar (Meerut).
3. The Sanitex Chemical Industries, Ltd., Baroda.
4. The Navsari Oil Products, Ltd., Navsari.
- \*5. The Deccan Chemicals & Fertilisers, Co., Hubli.
- \*6. Industrial Chemicals (India), Bombay.
- \*7. Maneklal Auxiliary Products, Bombay.

## II. CONSUMERS:

1. Martin & Harris Ltd., Calcutta.
2. Himani Works, 24 Parganas, Calcutta.
3. The Buckingham & Carnatic Co., Ltd., Madras.
4. The Tata Oil Mills Co., Ltd., Bombay.
5. The Bengal Chemical & Pharmaceutical Works, Ltd., Calcutta.
6. F. S. Kerr & Co., Ltd., Bombay.
7. Firestone Tyre & Rubber Co. of India, Ltd., Sewree, Bombay.
8. The Dunlop Rubber Co. (India) Ltd., Calcutta.
9. Hadfield (India) Ltd., Calcutta.
10. The Bharat Carbon & Ribbon Mfg. Co., Ltd., Karachi.
11. Kores (India) Ltd., Bombay.
12. Manyam & Co., Malleswaram, Bangalore.
13. Bata Shoe Co., 24 Parganas, Bengal.

## III. IMPORTERS:

1. Burmah-Shell Oil Storage & Distributing Co. of India, Ltd., Bombay.
2. Chudgor & Co., Bombay.
3. J. Mayr, Calcutta.
4. The Dunlop Rubber Co. (India) Ltd., Calcutta.
5. The Firestone Tyre & Rubber Co. of India Ltd., Bombay.
6. Batliboi & Co., Bombay.
7. Moolchand Jeykishandas & Co., Ahmedabad.
8. Volkart Bros., Bombay.
- \*9. Imperial Chemical Industries (India) Ltd., Calcutta.
10. Sepulchre Bros. (India) Ltd., Bombay.
11. H. S. Cox & Co., Rampart Row, Bombay.

## IV. ASSOCIATIONS:

- \*1. All India Manufacturers' Organisation, Bombay.
- \*2. Bombay Provincial Chemical Manufacturers' Association, Bombay.
- \*3. Indian Chemical Manufacturers' Association, Calcutta.
- \*4. All other Chambers & Associations.

## APPENDIX II.

*List of witnesses examined during the public inquiry held at Bombay on the 25th of June, 1947. (Vide paragraph 3).*

## A. Producers—

1. Mr. B. Maitra and	..	..	representing	The Calcutta Chemical Co., Limited Calcutta.
2. Mr. J. C. Das Gupta	..	..		
3. Mr. M. G. Kotibhaskar	..	..	Do.	Navsari Oil Products, Ltd., Navsari.
4. R. V. Karve	..	..	Do.	
5. Mr. H. H. Soni	..	..	Do.	The Sanitex Chemical Industries, Ltd., Baroda.
6. Pandit J. M. Saran	..	..	Do.	Modi Vanaspati Mfg. Co., Modinagar (Meerut).
7. Dr. L. A. Bhatt	..	..	Do.	Indian Chemical Manufacturers' Association, Calcutta & The Bombay Province Chemical Manufacturers' Association, Bombay.

## B. Importers—

1. Mr. J. E. H. Sorby	..	..	Do.	Burmah Shell Oil Storage & Distributing Co. of India Ltd., Bombay.
2. Mr. H. D. Lewis	..	..	Do.	*The Dunlop Rubber Co. (India) Ltd., Calcutta.

## C. Consumers—

1. Mr. S. K. Bhattacharjee	..	..	Do.	Himani Works, 24 Parganas, Calcutta.
2. Mr. A. L. Blackwood	..	..	Do.	Firestone Tyre & Rubber Co. of India Ltd., Bombay.
3. Mr. A. N. Batra	..	..	Do.	The Bharat Carbon & Ribbon Manufacturing Co., Ltd., Karachi.
4. Mr. S. H. Rao	..	..	Do.	Manyam & Co., Malleswaram Bangalore.

## D. Officials—

Dr. Ali Ahmed, Development Officer		Do.	Industries & Supplies Department, New Delhi.
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\*The are also consumers.

## APPENDIX III.

*Statement showing factories producing Oleic Acid and Stearic Acid and giving information regarding the date of commencement, rated capacity, actual production and number of workers employed.*

(Vide paragraphs 4 and 9).

Name of manufacturer and location of factory.	Date of commencement.	Annual production capacity.		Annual production.		Number of workers.	Remarks.
		Stearic Acid	Oleic Acid	Stearic Acid	Oleic Acid		
1. Navsari Oil Products Ltd., Vijalpore Road, Navsari (Baroda State).	1944	400	360	77 (in 1944-45) (from June 44 to Jan. 45)	67	24	With the addition of a small equipment (a cylinder) already available at the factory, capacity can be raised to 600 tons Stearic Acid and 540 tons Oleic Acid
2. Calcutta Chemicals Ltd. (i) 36, Pandit Road, Calcutta. (ii) 6, Tiljala P. O. 24 Parganas.	1944	300	300	7 (between 1944 & 46)	28	24	..
3. M/s. Sanitex Chemical Industrial Ltd., Industrial Area, Gorwa Road, Baroda	1945	10	60	21 (in 1945-46)	..	25	Representatives of the firm stated that the capacity for Oleic Acid was 120 tons, but 60 tons was considered more appropriate.
<i>New Factory Likely to Commence Production in Near Future</i>							
4. M/S. Modi Vanaspati Manufacturing Co., Modinagar, U. P.	..	6(X)	6(X)	..	..	50	Production expected to commence by January, 1948, with 4 autoclaves and 5 distillation plants now under installation.

## APPENDIX IV.

*Details of cost of production and fair selling price per cwt. of triple pressed Stearic Acid in India in 1947-48, 1948-49 and 1949-50 (Navsari Oil Products, Ltd. Navsari). (Vide Paragraph 11).*

	Details	May 1947	Details	1947-48	Details	1948-49 and 1949-50
<b>1. Materials :</b>						
Hydrogenated Oil ..	1.54 cwts @ Rs. 1.2-6 per lb. 0.15 cwts @ Rs. 16/- per cwt	Rs. 199.430 2.400	1.54 cwts @ Rs. 1.2-0 per lb. 0.15 cwts @ Rs. 38/- per cwt	Rs. 194.040 1.200	1.54 cwts @ Rs. 13/- per lb. 0.15 cwts. @ Rs. 8/- per cwt.	Rs. 140.140
Sulphuric Acid ..	..	..	..	..	..	1.200
Catalyst ..	..	..	..	..	..	..
Caustic Soda ..	..	..	..	..	..	..
Lime ..	9.14 lbs @ 11/8/- per cwt.	0.939	..	0.500	..	0.500
Other direct materials ..	..	0.200	..	0.200	..	0.200
		202.069		195.940		142.040
<b>2. Power and Fuel :</b>						
(a) Electricity ..	..	0.135	..	0.135	..	0.135
(b) Coal ..	..	2.299	..	2.299	..	2.299
<b>3. Labour ..</b>	<b>..</b>	<b>3.718</b>	<b>..</b>	<b>3.000</b>	<b>..</b>	<b>3.000</b>
<b>4. Repairs &amp; Maintenance ..</b>	<b>..</b>	<b>0.306</b>	<b>..</b>	<b>0.200</b>	<b>..</b>	<b>0.200</b>
<b>5. Consumable Stores ..</b>	<b>..</b>	<b>0.612</b>	<b>..</b>	<b>0.612</b>	<b>..</b>	<b>0.612</b>
<b>6. Establishment ..</b>	<b>..</b>	<b>4.343</b>	<b>..</b>	<b>2.250</b>	<b>..</b>	<b>2.250</b>
<b>7. Depreciation ..</b>	<b>..</b>	<b>3.265</b>	<b>..</b>	<b>1.600</b>	<b>..</b>	<b>1.500</b>
<b>8. Other overheads ..</b>	<b>..</b>	<b>11.922</b>	<b>..</b>	<b>6.500</b>	<b>..</b>	<b>6.500</b>
<b>9. Packing Charges ..</b>	<b>..</b>	<b>1.531</b>	<b>..</b>	<b>1.531</b>	<b>..</b>	<b>1.531</b>
<b>10. Selling Expenses ..</b>	<b>..</b>	<b>14.286</b>	<b>..</b>	<b>10.000</b>	<b>..</b>	<b>8.000</b>
		245.406		224.067		168.067
<b>Credit for Materials recovered :</b>						
Oleic Acid ..	..	22.477	..	26.177	..	36.828
Glycerine ..	..	11.898	..	12.681	..	7.000
Others ..	..	..	..	..	..	..
<b>Total Credit ..</b>	<b>..</b>	<b>34.375</b>	<b>..</b>	<b>37.858</b>	<b>..</b>	<b>43.828</b>
<b>Net Total ..</b>	<b>..</b>	<b>211.031</b>	<b>..</b>	<b>186.200</b>	<b>..</b>	<b>124.239</b>
Interest ..	..	3.267	..	3.000	..	2.253
Profit @ 10% on fixed capital ..	..	3.619	..	1.560	..	1.560
<b>Fair Selling Price per cwt.</b>	<b>..</b>	<b>217.817</b>	<b>..</b>	<b>190.709</b>	<b>..</b>	<b>128.052</b>
<b>Price per lb.</b>		<b>Rs 1/15/1</b>		<b>i.e. Rs. 191/-</b>		<b>i.e. Rs. 128/-</b>
<b>Estimated output ..</b>	<b>..</b>	<b>245 cwts (@2,940 cwts per year.)</b>		<b>Rs. 1/11/3</b>	<b>Rs. 1/2/4</b>	<b>Rs. 1/2/4</b>

## APPENDIX V.

*Cost of production per cwt. of triple pressed Stearic Acid by the Navsari Oil Products Ltd., Navsari in 1944-45. (Vide Paragraph 11.)*

## 1. Materials—

							Rs.
(a) Tallow 2.201 cwt. @ Rs. 41.0 per cwt.	..	..	..	..	..	..	90.241
(b) Hydrogenated Oil	..	..	..	..	..	..	..
(c) Sulphuric Acid 0.268 cwts. @ Rs. 17.0 per cwt	..	..	..	..	..	..	4.556
(d) Catalyst	..	..	..	..	..	..	..
(e) Caustic Soda	..	..	..	..	..	..	..
(f) Lime 0.139 cwt. @ Rs. 5.6 per cwt.	..	..	..	..	..	..	0.778
(g) Other direct materials	..	..	..	..	..	..	..
						Total	.. 95.575

## 2. Power &amp; Fuel—

(a) Electricity 13.436 units @ Rs. 0.2.0 per unit ..	..	..	..	..	..	1.679
(b) Coal 0.086 cwt. @ Rs. 30/- per unit ..	..	..	..	..	..	2.580
3. Labour ..	..	..	..	..	..	7.203
4. Repairs and maintenance ..	..	..	..	..	..	0.580
5. Consumable Stores ..	..	..	..	..	..	1.303
6. Establishment ..	..	..	..	..	..	11.542
7. Depreciation ..	..	..	..	..	..	6.608
8. Other Overheads ..	..	..	..	..	..	29.993
9. Packing Charges ..	..	..	..	..	..	8.693
10. Selling Expenses ..	..	..	..	..	..	11.738
					Total	.. 177.494

## Credit for Materials Recovered—

Oleic Acid 0.961 cwt. @ Rs. 46/- per cwt.	..	..	..	..	..	44.206
Glycerine 0.162 cwt. @ Rs. 70/- per cwt.	..	..	..	..	..	11.340
Others ..	..	..	..	..	..	..
					Total Credit	.. 55.546
					Net Total	.. 121.948
					Less	.. Rs. 122

Quantity produced .. .. .. .. .. .. .. .. 1,362 cwts.

## APPENDIX VI.

Statement showing prewar and current c.i.f. prices and landed costs of Stearic Acid. (Vide Paragraph 14.)

	Grade	Period	C.I.F.		Customs Duty.	Clearing & other charges	Landed cost	Selling price
			Rs. A. P.	Rs. A. P.				
<b>Prewar—</b>								
1. Burmah-Shell Oil Storage & Distributing Co. (India) Ltd., Bombay.	Triple Pressed (UK)	March/1939	36 1 0	8 12 3 (25%)	1 12 0	15 9 3	..	
2. J. Mayr & Co., Calcutta.	Triple Pressed (USA)	1939/1940	40 4 0	10 1 0 (25%)	1 0 4	31 5 1	71 0 0	
3. Dunlop Rubber Co. (India) Ltd., Calcutta.	..	Prewar	13 14 9	4 11 9 (25%)	1 5 0	15 9 5	..	
<b>Present—</b>								
1. Firestone Tyre & Rubber Co. (India) Ltd., Bombay.	Triple Pressed (USA)	June/1941/1942	114 7 0	42 7 6 (30%)	1 4 0	84 2 0	..	
2. J. Mayr & Co., Calcutta.	Triple Pressed (USA)	1940	12 2 0	3 9 7 (30%)	1 1 6	13 5 4	..	
3. Sepulchre Bros. (India) Ltd., B'lly.	Triple Pressed (USA)	Jan/Jan/1947	183 15 7	51 3 0 (30%)	1 1 5	141 0 0	294 0 0	
4. Dunlop Rubber Co. (India) Ltd., Calcutta	Double Pressed (USA)	Present	51 10 7	13 2 0 (30%)	1 0 8	68 2 3	..	
5. Batliboi & Co., Bombay.	Double Pressed (Australia)	June/1940	71 2 0	21 5 5 (30%)	1 10 0	94 1 5	108 0 0	
6. Chandigar & Co., Bombay	..	May/1946	51 1 4	18 5 2 (30%)	1 3 2	80 9 8	92 11 0	
7. Burmah-Shell Oil Storage & Distributing Co. (India) Ltd., Bombay.	Single Pressed	1946	59 4 0	15 1 3 (30%)	3 12 0	69 1 3	74 9 8	